

CLAIMS

1. A wireless communications system which uses at least two kinds of wireless communication networks, enables to simultaneously connect to a basic access network for executing signaling communication in which communication is controlled so as to be continuously switched and to a wireless access network for executing data communications other than the signaling communication and comprises wireless communication terminals and a wireless communication server, characterized in that:

each of the wireless communication terminals comprises a seamless application processing unit for executing connection processing to the basic access network and connection/disconnection processing to and from the wireless access network, a basic access network client processing unit having a client function in the signaling communication, a multicast communication node application processing unit for setting multicast reception using at least the two kinds of the wireless communication networks, respective network devices corresponding to the respective wireless communication networks, and wireless communication terminal position obtaining means; and

the wireless communication server comprises a home agent application processing unit for setting a multicast

transmission using at least the two kinds of the wireless communication networks, a basic access network server processing unit for notifying, when the wireless communication networks are continuously switched, the wireless communication terminals of a wireless communication network acting as a switching candidate, for managing the signalling communication for communicating the status of the respective wireless communication terminals therebetween, and for managing the registration/update processing of the respective wireless communication terminals, a terminal status table for managing the status of the respective wireless communication terminals, a terminal configuration table for managing wireless communication network interfaces implemented in the respective wireless communication terminals, and a preference setting table for managing the order of the wireless communication networks acting as switching candidates when the wireless communication networks are continuously switched,

wherein the basic access network client processing unit obtains position information from the position obtaining means and notifies the basic access network server processing unit of the position information; and the basic access network server processing unit registers the position information to the terminal status table.

2. A wireless communications system according to claim 1, characterized in that:

the wireless communication terminal comprises a map display client application processing unit for displaying at least the current position periphery map of the wireless communication terminal; and

the wireless communication server comprises an image creation processing unit for creating the map image of an optional position referring to at least previously prepared map data and a map display server application processing unit for sending the map image to the wireless communication terminal,

wherein when the map display server application processing unit receives a map image creation request from the map display client application processing unit, the map display server application processing unit obtains the position information of the wireless communication terminal from the terminal status table and sends a periphery map image creation request to the image creation processing unit together with the position information; and

the periphery map image created by the image creation processing unit is returned to the map display server application processing unit and further sent to the map display client application processing unit as a response.

3. The wireless communications system according to claim 1, wherein:

the wireless communication server comprises two servers of a home agent server comprising the home agent application processing unit and the basic access network server processing unit, and a resource server comprising the terminal status table, the terminal configuration table, and the preference setting table; and

the basic access network server processing unit obtains or registers the information in the respective tables of the resource server through a wired or wireless communication network.

4. A wireless communications system according to claim 3, characterized in that:

the wireless communication terminal comprises a map display client application processing unit for displaying at least the current position periphery map of the wireless communication terminal; and

the resource server comprises an image creation processing unit for creating the map image of an optional position referring to at least previously prepared map data and a map display server application processing unit for sending the map image to the wireless communication terminal,

wherein when the map display server application processing unit receives a map image creation request from the map display client application processing unit, the map display server application processing unit obtains the position information of the wireless communication terminal from the terminal status table as well as sends a periphery map image creation request to the image creation processing unit together with the position information; and

the periphery map image created by the image creation processing unit is returned to the map display server application processing unit and further sent to the map display client application processing unit as a response.